



Nombre del alumno(a):

Ramirez Olvera Valeria

Materia:Aplicaciones web

Catedrático:Diana Xochitl Ruano Vargas

Practica 01

Grupo:TIID_04_01

15/01/26

PRÁCTICA 01 – Instalación del Entorno Profesional

Objetivo general

El estudiante instalará y configurará las herramientas necesarias para desarrollar aplicaciones web modernas utilizando Angular como frontend, dejando preparado el entorno para integrar posteriormente el backend con Flask y MongoDB.

Herramientas a instalar

- Node.js (LTS)
- Angular CLI
- Visual Studio Code
- Extensiones de Visual Studio Code
- Git
- GitHub Desktop
- MongoDB Compass

Instalación de node js

Primero entramos al sitio de node js

The screenshot shows the Node.js website with the following content:

Run JavaScript Everywhere

Node.js® is a free, open-source, cross-platform JavaScript runtime environment that lets developers create servers, web apps, command line tools and scripts.

[Get Node.js®](#)

[Get security support](#)
for EOL Node.js versions


Node.js is proudly supported by the partners above [and more](#).

```
1 // server.mjs
2 import { createServer } from 'node:http';
3
4 const server = createServer((req, res) => {
5   res.writeHead(200, { 'Content-Type': 'text/plain' });
6   res.end('Hello World!\n');
7 });
8
9 // starts a simple http server locally on port 3000
10 server.listen(3000, '127.0.0.1', () => {
11   console.log('Listening on 127.0.0.1:3000');
12 });
13
14 // run with `node server.mjs`
```

JavaScript [Copiar al portapapeles](#)

[Learn more what Node.js is able to offer with our Learning materials.](#)

Damos click en obtener Node js



The screenshot shows the Node.js download page. At the top, there's a navigation bar with links like 'Aprender', 'Acerca de', 'Descargar', 'Blog', 'Documentación', 'Contribuir', and 'Certificación'. Below this, the main heading is 'Descarga Node.js®'. There are dropdown menus to select the version (v24.13.0 (LTS)), platform (Windows), and package manager (npm). A green info bar suggests getting the latest version. Below that is a PowerShell script for installing Node.js using Docker. At the bottom, there are buttons for 'Windows Installer (.msi)' and 'Standalone Binary (.zip)', and a section for pre-compiled versions for Windows (x64).

node

Aprender Acerca de **Descargar** Blog Documentación Contribuir Certificación

Q Start typing... K

Descarga Node.js®

Obtiene Node.js® **v24.13.0 (LTS)** para **Windows** usando **Docker** con **npm**

Info Want new features sooner? Get the **latest Node.js version** instead and try the latest improvements!

```
1 # Docker provee instrucciones dedicadas para cada sistema operativo.
2 # Por favor consulta la documentación oficial en https://www.docker.com/get-started/
3
4 # Descarga la imagen de Docker de Node.js:
5 docker pull node:24-alpine
6
7 # Crea un contenedor de Node.js e inicia una sesión shell:
8 docker run -it --rm --entrypoint sh node:24-alpine
9
10 # Verifica la versión de Node.js:
11 node -v # Debería mostrar "v24.13.0".
12
13 # Verifica versión de npm:
14 npm -v # Debería mostrar "11.6.2".
```

PowerShell [Copiar al portapapeles](#)

Docker is a containerization platform. If you encounter any issues please visit [Docker's website](#).

O obtiene una versión pre compilada de Node.js® para **Windows** usando la arquitectura **x64**

[Windows Installer \(.msi\)](#) [Standalone Binary \(.zip\)](#)

Después de descargar la app ,ingresamos a nuestra terminal

Ingresamos : Para la verificación de ambas versiones

```
C:\Users\valer>node -v
v24.12.0

C:\Users\valer>npm -v
11.6.2
```

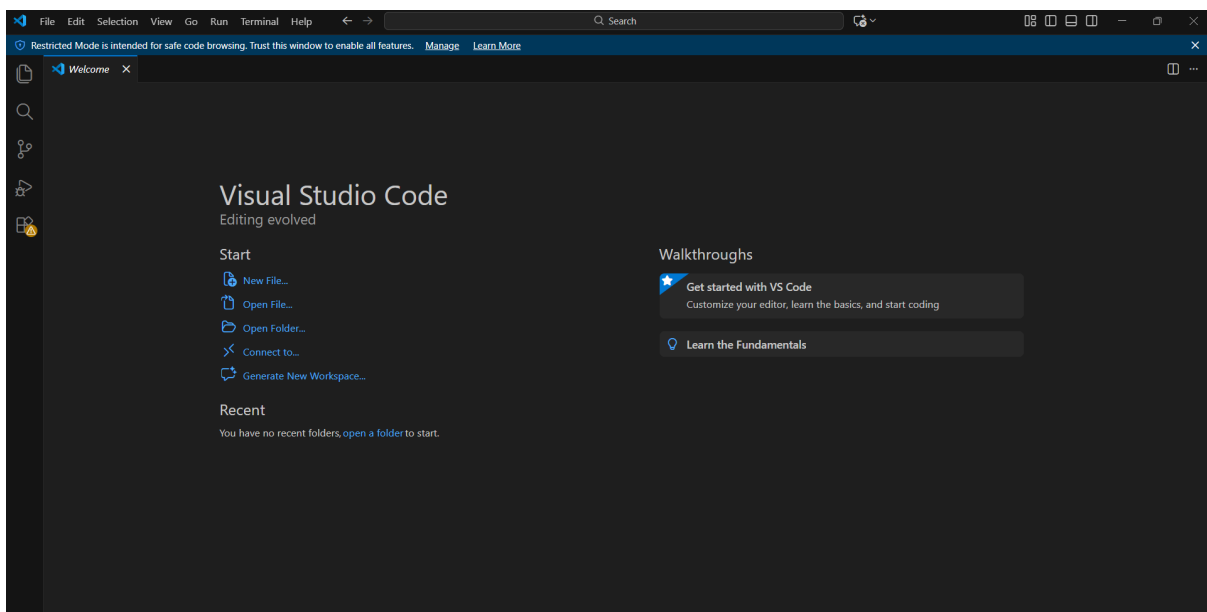
Instalación de Angular Cli

```
C:\Users\valer>npm install -g @angular/cli
added 298 packages in 35s
68 packages are looking for funding
  run 'npm fund' for details
C:\Users\valer>ng version

Angular CLI
Node.js
Package Manager
Operating System
```

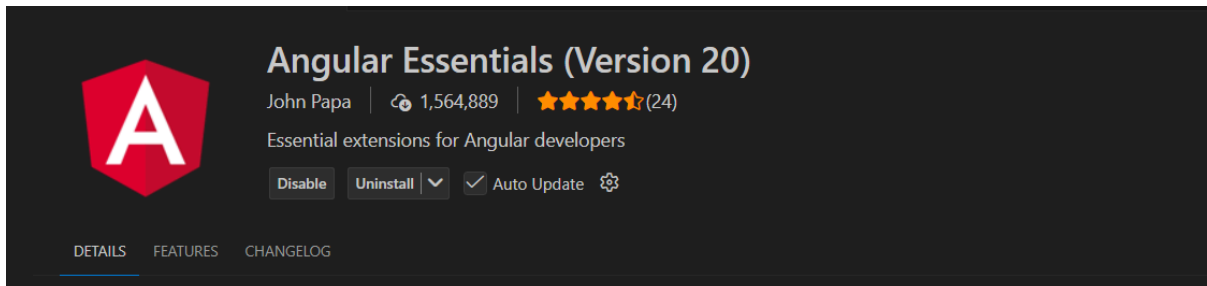
Angular CLI : 21.1.0
Node.js : 24.12.0
Package Manager : npm 11.6.2
Operating System : win32 x64

Instalación de visual studio :



Instalación de extensiones

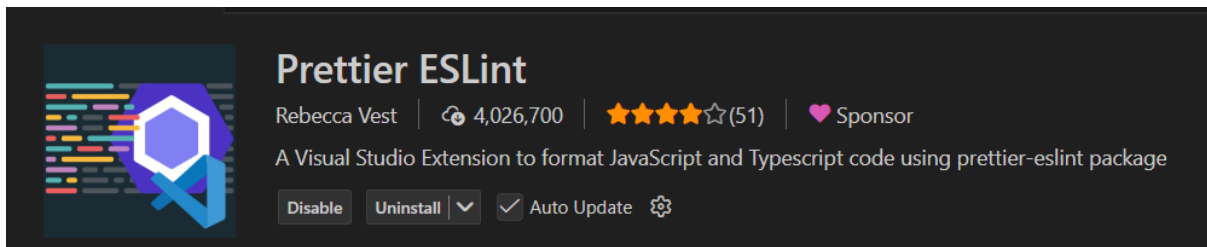
Angular



Angular Essentials (Version 20)
John Papa | 1,564,889 | ★★★★★ (24)
Essential extensions for Angular developers
Disable Uninstall Auto Update

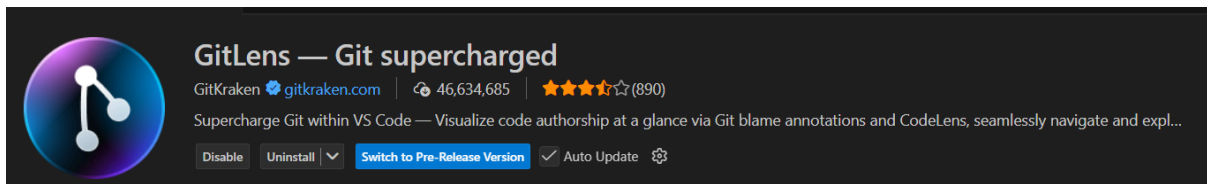
DETAILS FEATURES CHANGELOG

Prettier



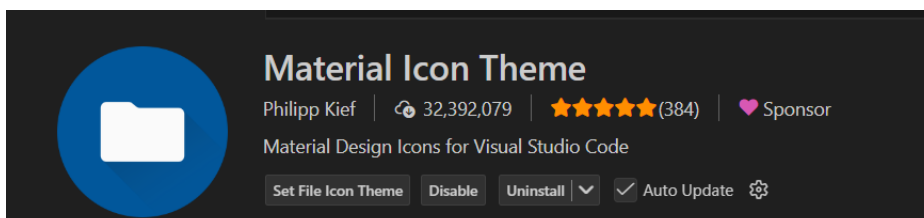
Prettier ESLint
Rebecca Vest | 4,026,700 | ★★★★★ (51) | Sponsor
A Visual Studio Extension to format JavaScript and Typescript code using prettier-eslint package
Disable Uninstall Auto Update

ESLint



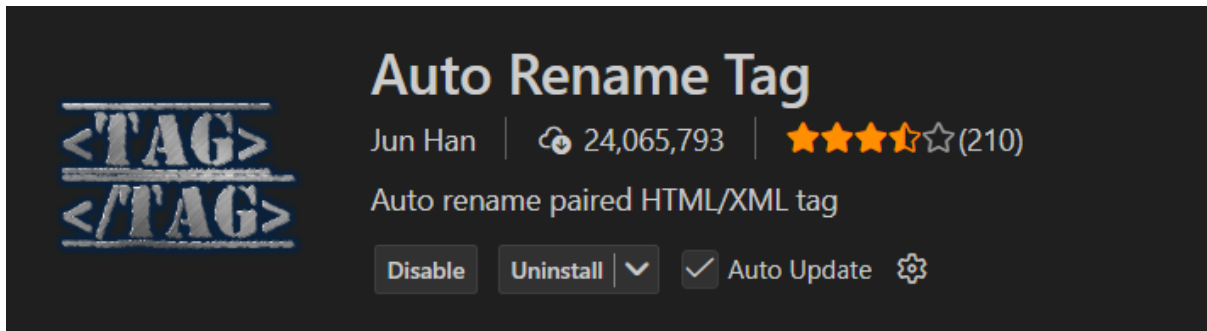
GitLens — Git supercharged
GitKraken | gitkraken.com | 46,634,685 | ★★★★★ (890)
Supercharge Git within VS Code — Visualize code authorship at a glance via Git blame annotations and CodeLens, seamlessly navigate and expl...
Disable Uninstall Switch to Pre-Release Version Auto Update

Material Icon Theme



Material Icon Theme
Philipp Kief | 32,392,079 | ★★★★★ (384) | Sponsor
Material Design Icons for Visual Studio Code
Set File Icon Theme Disable Uninstall Auto Update

Auto Rename Tag



Deshabilitar política de seguridad.

```
Windows PowerShell
Copyright (C) Microsoft Corporation. Todos los derechos reservados.

Instale la versión más reciente de PowerShell para obtener nuevas características y mejoras. https://aka.ms/PSWindows

PS C:\Users\valer> Get-ExecutionPolicy
Restricted
PS C:\Users\valer> Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -Scope CurrentUser
PS C:\Users\valer> Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -Scope CurrentUser
PS C:\Users\valer> Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -Scope CurrentUser
PS C:\Users\valer> Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -Scope CurrentUser
PS C:\Users\valer> Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -Scope CurrentUser
PS C:\Users\valer> Get-ExecutionPolicy
RemoteSigned
PS C:\Users\valer>
```

Instalación y configuración de Git

verificacion de instalacion

```
Microsoft Windows [Versión 10.0.26100.7462]
(c) Microsoft Corporation. Todos los derechos reservados.

C:\Users\valer>git --version
git version 2.52.0.windows.1

C:\Users\valer>
```

Configurar identidad global:

```
Microsoft Windows [Versión 10.0.26100.7462]
(c) Microsoft Corporation. Todos los derechos reservados.

C:\Users\valer>git --version
git version 2.52.0.windows.1

C:\Users\valer>git config --global user.name "Valeria"

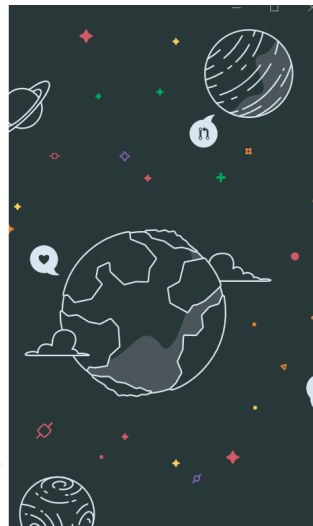
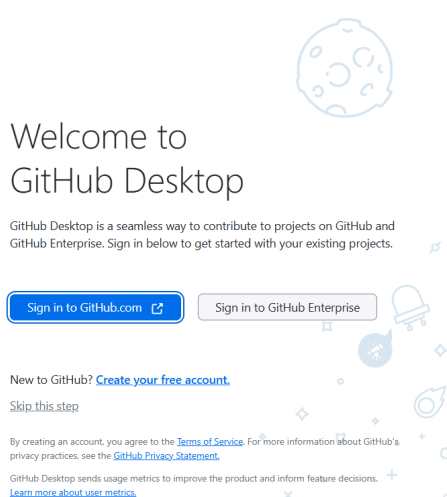
C:\Users\valer>git config --global user.email "valrami@micorreo.upp.edu.mx"

C:\Users\valer>git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=schannel
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.helper=manager
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.name=Valeria
user.email=valrami@micorreo.upp.edu.mx

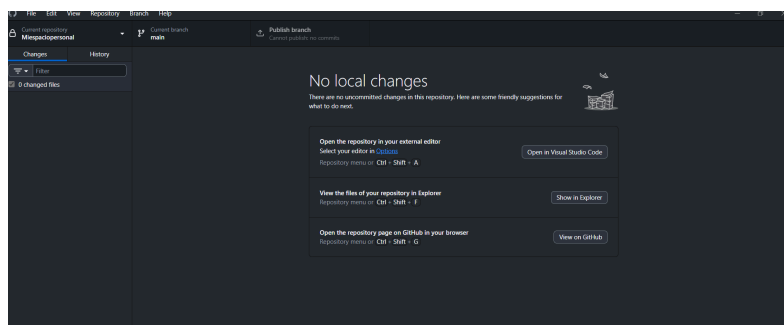
C:\Users\valer>
```




GitHub Desktop

Descargamos Github



Clonar un repositorio existente.



 Miespaciopersonal	15/01/2026 09:00 p. m.	Carpeta de archivos	
 index	28/12/2025 08:16 p. m.	Microsoft Edge HT...	3 KB
 style	28/12/2025 07:58 p. m.	Archivo de origen ...	1 KB

Crear repositorio local -practicas

Create a new repository

Name

Practicas_web_ValeriaRamirezOlvera

Description

Local path

C:\Users\valer\OneDrive\Documentos\aplicaciones

Choose...

☐ Initialize this repository with a README

Git ignore

None

License

None

The repository will be created at C:\Users\valer\OneDrive\Documentos\aplicaciones web\Practicas_web_ValeriaRamirezOlvera.

Create repository

Cancel

publicar repositorio

Publish repository

GitHub.com

GitHub Enterprise

Name

Practicas_web_ValeriaRamirezOlvera


Description

☒ Keep this code private

Publish repository

Cancel

Crear carpeta

 Practica1	15/01/2026 09:10 p. m.	Carpeta de archivos	
---	------------------------	---------------------	--

Crear proyecto en angular

creamos nuestro proyecto :

```
PS C:\Users\valer\OneDrive\Documentos\aplicaciones web\Practicas_web_ValeriaRamirezOlvera> ng new Practica01

would you like to share pseudonymous usage data about this project with the Angular Team
at Google under Google's Privacy Policy at https://policies.google.com/privacy. For more
details and how to change this setting, see https://angular.dev/cli/analytics.

Yes

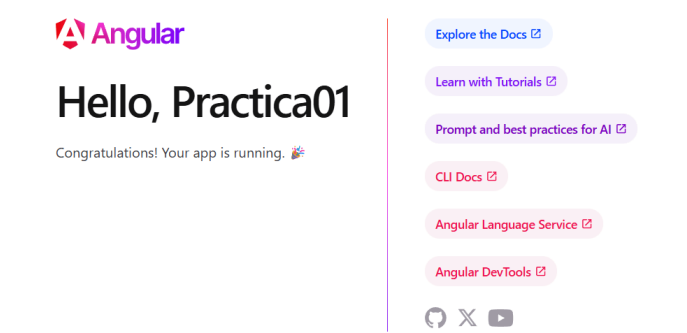
Thank you for sharing pseudonymous usage data. Should you change your mind, the following
command will disable this feature entirely:

  ng analytics disable --global

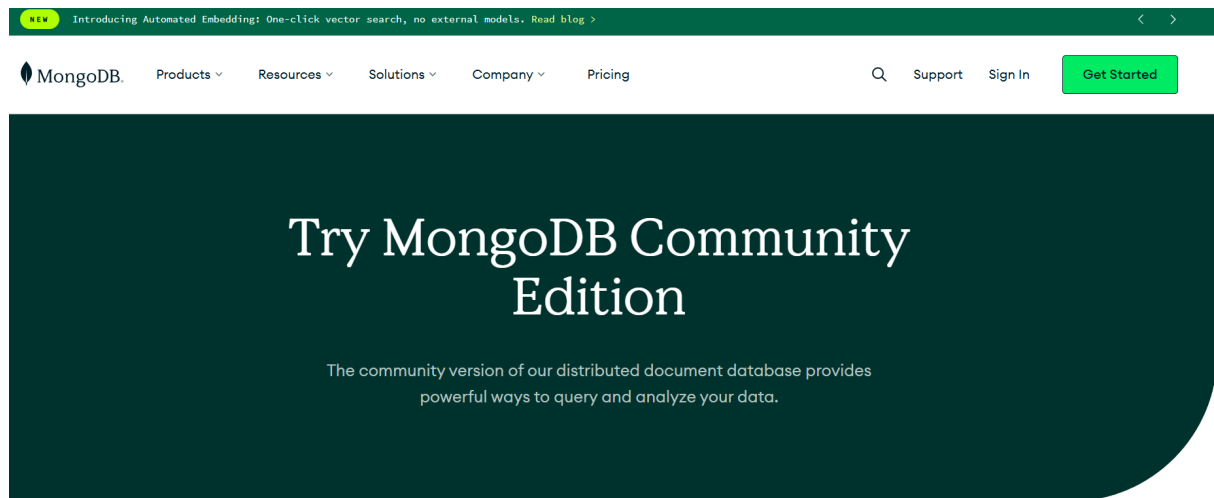
Global setting: enabled
Local setting: No local workspace configuration file.
Effective status: enabled
✓ Which stylesheet system would you like to use? CSS [https://developer.mozilla.org/docs/Web/CSS]
✓ Do you want to enable Server-Side Rendering (SSR) and Static Site Generation (SSG/Prerendering)? Yes
✓ Which AI tools do you want to configure with Angular best practices? https://angular.dev/ai/develop-with-ai None
CREATE Practica01/angular.json (2148 bytes)
CREATE Practica01/package.json (1190 bytes)
CREATE Practica01/README.md (1522 bytes)
CREATE Practica01/tsconfig.json (690 bytes)
CREATE Practica01/.editorconfig (331 bytes)
CREATE Practica01/.gitignore (666 bytes)
CREATE Practica01/tsconfig.app.json (464 bytes)
CREATE Practica01/tsconfig.spec.json (456 bytes)
CREATE Practica01/.vscode/extensions.json (134 bytes)
CREATE Practica01/.vscode/launch.json (490 bytes)
CREATE Practica01/.vscode/mcp.json (191 bytes)
CREATE Practica01/.vscode/tasks.json (1020 bytes)
CREATE Practica01/src/main.ts (228 bytes)
CREATE Practica01/src/index.html (389 bytes)
CREATE Practica01/src/styles.css (81 bytes)
CREATE Practica01/src/main.server.ts (380 bytes)
CREATE Practica01/src/server.ts (1677 bytes)
CREATE Practica01/src/app/app.spec.ts (700 bytes)
CREATE Practica01/src/app/app.ts (304 bytes)
CREATE Practica01/src/app/app.css (0 bytes)
CREATE Practica01/src/app/app.html (20446 bytes)
CREATE Practica01/src/app/app.config.ts (453 bytes)
CREATE Practica01/src/app/app.routes.ts (80 bytes)
CREATE Practica01/src/app/app.config.server.ts (438 bytes)
CREATE Practica01/src/app/app.routes.server.ts (174 bytes)
CREATE Practica01/public/favicon.ico (15086 bytes)
```

Browser bundles		
Initial chunk files	Names	Raw size
main.js	main	48.51 kB
styles.css	styles	95 bytes
	Initial total	48.60 kB
Server bundles		
Initial chunk files	Names	Raw size
main.server.mjs	main.server	49.77 kB
server.mjs	server	1.81 kB
polyfills.server.mjs	polyfills.server	243 bytes

Evidencia: aplicación Angular funcionando en <http://localhost:4200>



Instalacion de Mongo DB



Mongo DB conectado

